

REMARKS

As set forth in more detail below, the Examiner identified two separate inventions, an apparatus and a method, and two species for the apparatus claim. In a provisional election, the Applicant selected the apparatus invention, identified as Group I, and Species I of those claims. The Applicant hereby confirms that election, without traverse. The Examiner rejected claims 1-4, 5, 8, 9, 11-13 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Dooley Jr., et al. (U.S. Patent No. 7,081,232) in view of Mock Sr. Et al. (U.S. Patent No. 7,065,803). The Examiner rejected claims 6 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Dooley in view of Mock as applied above, and further in view of Fitton (U.S. Patent No. 6,106,771). The Examiner rejected claims 10 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Dooley in view of Mock as applied above, and further in view of Rauchwerger (U.S. Patent No. 5,743,287). The Examiner rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Dooley in view of Mock as applied above, and further in view of Regunathan, et al. (U.S. Patent No. 4,548,227). In response, the Applicant has amended certain claims and has set forth arguments supporting the patentability of the claims. The Applicant believes the amendments made in response to the Examiner's rejections have placed the application in position for allowance.

Election/Restriction

In the Office Action, the Examiner identified two patentably distinct inventions, with Group I being identified with regard to the apparatus of claims 1-18 and Group II being

identified with regard to the method of claims 19 and 20. Pursuant to 35 U.S.C. § 121, the Examiner has required Applicant to a single invention. With regard to the invention of Group I, the Examiner identified two species, Species I the sealing means comprising a quick release valve of claims 6 and 14 and Species II being the sealing means comprising a seat valve of claims 7 and 15. The Examiner required the Applicant to elect a single disclosed species for prosecution on the merits. Pursuant to a telephone conference on December 19, 2006, Applicant made a provisional election to prosecute the invention of Group I and the invention of Species I. Applicant hereby affirms the election of Group I, Species 1, without traverse. As a result, claims 7, 15, 19 and 20 are withdrawn as being drawn to a non-elected invention and species.

Amendments to the Claims

As set forth below, Applicant has amended claims 3 and 11 to address the Examiner's rejections under 35 U.S.C. § 103(a) and cancelled claims 12 and 13. In addition, Applicant is cancelling claims 19 and 20 as being directed to a non-selected invention.

Claim 2- Applicant is amending claim 2 to clarify that the supply of chemicals is disposed inside the inner chamber, as set forth in the Specification at least at page 13, lines 14 through 19.

Claim 3 - Applicant is amending claim 3 to clarify that the inner chamber introduced in claim 2, from which claim 3 depends, is a perforated sleeve as opposed to comprising a perforated sleeve. This amendment is supported by FIG. 1.

Claim 11 - Applicant is amending claim 11 to add the language that the device of the present invention comprises a perforated sleeve that is disposed in the fluid chamber in fluid communication with the fluid chamber and that the perforated sleeve has a supply of chemicals therein for sanitizing the vacuum line. This amendment is supported by the original specification (i.e., page 13, line 14 through page 14, line 7), FIG. 1 and original claims 12 and 13.

Claim 12 - Applicant is cancelling claim 12 as being incorporated into amended claim 11.

Claim 13 - Applicant is cancelling claim 13 as being incorporated into amended claim 11.

Claim 19 - Applicant is cancelling independent claim 19 as being directed to a non-selected invention.

Claim 20 - Applicant is cancelling claim 20 as being directed to a non-selected invention.

Rejection under 35 U.S.C. § 103(a)

With regard to the obviousness rejections for claims 1-6, 8-14 and 16-18, which are based on the patent to Dooley in view of Mock, and for certain claims (as set forth above) further in view of Fitton, Rauchwerger or Regunathan, Section 103(a) only denies patentability to those inventions whose "subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains.” (35 U.S.C. § 103.) Initially, as stated by the court in In re Geiger, 2 USPQ2d 1276 (CAFC 1987), “[o]bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination.” (In re Geiger, 2 USPQ2d at 1278.) The motivation or suggestion to combine references must exist, otherwise the determination of obviousness involves nothing more “than indiscriminately combining prior art.” (Micro Chemical Inc. v. Great Plains Chemical Co., 41 USPQ2d 1238, 1244 (CAFC 1997).) In In re Fritch, 23 USPQ2d 1780 (CAFC 1992), the Federal Circuit stated the following:

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so. Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious “modification” of the prior art. The mere fact that the prior art may

be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. (In re Fritch, 23 USPQ2d at 1783-84 (internal quotes and citations removed).)

Respectfully, nothing suggests combining the teachings of the referenced patents to arrive at Applicant's invention. Nothing in these references, or any knowledge generally available to one of ordinary skill in the art, compels, teaches, suggests or even offers any incentive such that an individual wanting to have vacuum line sanitization device with the attributes of Applicant's invention would utilize the teachings of these patents to achieve the locking/unlocking advantages of Applicant's invention. (See In re Fritch, 23 USPQ2d at 1783; In re Geiger, 2 USPQ2d at 1278.)

With regard to Applicant's invention, the claims of the present patent, as amended, are directed to a vacuum line sanitization device that allows the user to quickly, efficiently, economically and effectively clean a vacuum line, such as are used in dental or medical facilities. In the preferred embodiment, a chemical cartridge 48 is placed inside the perforated sleeve (inner chamber) 24 that is disposed inside the fluid chamber 13 defined by the canister body 12. With the canister body 12 closed, the operator connects the first end 50 of vacuum line 52 to the outlet stem 42 at outlet 20. With the water supply line 34 connected to the inlet valve 30, the operator initiates fluid flow in fluid supply line 34 to allow fluid to flow into the fluid chamber 13 until the level is at or above the fluid indicator level 28, at which time the fluid flow into fluid chamber 13 is discontinued. Once the chemical cartridge 48 has sufficiently dissolve, the operator opens valve 44 and activates the vacuum system to vacuum the dissolved liquid chemical from fluid chamber 13 through the vacuum line 52. Once the chemical is vacuumed out of fluid chamber 13, thereby cleaning, disinfecting and deodorizing vacuum line 52, the operator closes valve 44.

With regard to Dooley, the chemical feeder of that invention has a container 50 that is filled with chemical and then inverted to be placed onto housing 10 and secured thereto by latches 4 and 4a. Water or other dissolving fluid flows into T-member 15, which directs the water upward into distributor head 14 where it is deflected by the dome 18 thereof and forced out through spray nozzles 19 of the distributor head 14. The fluid is sprayed laterally from the distributor head 14 into contact with the chemical material previously placed into container 50. The solution formed by the water falls by gravity through the holes 33 in the lid into cavity 2 of housing 10, where the chemical solution is then forwarded to the point of application, which in the examples is a pool.

With regard to Mock, which is a method of dispensing cyanuric acid, the apparatus includes a flood feeder 100 having a cylindrical housing 101 in which is placed a product dispensing bag 120 having product therein. A hose 107 connects to inlet 105 near the bottom of the housing 101 and a valve 106 regulates how much water enters into the housing 101. An outlet 108 is located near the top of the housing 101 and connects, through a valve 109, to a hose 110. Water from the inlet hose 107 flows into the housing 101 to dissolve a portion of the product in the product dispensing bag 120. Chemical solution flows out of the housing 101 through hose 110 to a pool.

Rejection of Claims 1-4, 5, 8, 9, 11-13 and 16

In the present Office Action, the Examiner rejected claims 1-4, 5, 8, 9, 11-13 and 16 under Section 103(a) as being unpatentable over Dooley in view of Mock. With regard

to the claims of the present application, including those amended, the Applicant respectfully disagrees with this conclusion. As set forth above, neither Dooley or Mock are directed to use with vacuum sanitization lines and neither is configured in the manner set forth in the claims of the present application. The teachings from Dooley and Mock are not reasonably pertinent to the problems solved by Applicants' invention. (See In re Clay, 23 USPQ2d 1058, 1060 (CAFC 1992.) Although both Dooley and Mock are chemical delivery systems for dissolving and then delivering a quantity of chemical solution, neither of these references are directed to a such a system for use with a vacuum line system. Instead, both Dooley and Mock are for systems that require some form of pressure to deliver the dissolved chemical solution to the point of use (i.e., the pools described in these patents). Because the subject matter and purpose of Applicant's invention is different than the subject and purpose of the invention in Dooley and Mock, an inventor would not have been motivated to look to or consider this patent in attempting to solve the problems solved by Applicants' invention. (See In re Clay, 23 USPQ2d at 1061.) As a result, a person having ordinary skill in the art would not apply the teachings of Dooley or Mock to arrive at Applicant's invention and nothing in Dooley or Mock suggests such an application, particularly in light of the differences between Dooley/Mock and Applicant's invention.

Even if the Dooley and Mock references are analogous art, respectfully, nothing suggests combining the teachings of Dooley and Mock with knowledge commonly known in the art, in any combination suggested by the Examiner, to arrive at Applicant's invention. In particular, Dooley does not have the sealing means on the inlet or the dispensing means at the

outlet of claims 1 and 11 (the independent claims). In the Office Action, the Examiner cites Dooley at column 6, lines 36-40 for the proposition that Dooley has an inlet valve configured to prevent flow of fluid from the fluid chamber out of the canister body through the inlet.

Respectfully, Applicant disagrees with this conclusion. What Dooley states is:

A valve (not shown) is typically inserted in [the piping that connects to the water source] in order to control the flow of dissolving fluid to the unit, i.e., to start and stop the flow of dissolving fluid and/or to control the rate at which dissolving fluid enters the unit.

There is no reference to the inlet valve being configured to prevent the flow of fluid out the chamber through the inlet valve and no sealing means therefor as set forth in Applicant's claim 1 and 11. This is likely due to the fact that Dooley (as well as Mock) does not rely on the suction from a vacuum line to pull the dissolved chemical out of the fluid chamber into a vacuum line where it is used to clean, disinfect and deodorize the vacuum line. Likewise, the Examiner references Dooley at column 6, lines 25-32 for the proposition that it discloses a connecting means for connecting to one end of a vacuum line. What Dooley states is:

Inlet port 9 has a female fitting 20 mounted within port 9, and outlet port 7 has a female fitting 11 mounted within outlet port 7. Outlet port 7 has internal threads to allow discharge conduit 11, which has matching external threads, as shown, to be threaded into outlet port 7. As shown, elbow 13 is connected to discharge conduit 11. With additional suitable piping means connected to elbow 13, chemical solution is conveyed from cavity 2 to the point of use or application.

Because Dooley (as well as Mock) is not configured for use with a vacuum line, there is no need for the outlet to comprise a connecting means for connecting the outlet to one end of the vacuum line, as is required for the vacuum line sanitization device of Applicant's invention and set forth in claims 1 and 11. As a result, the claims of Applicant's patent application are not

obvious in light of Dooley and Mock and nothing in either Dooley or Mock teaches, suggests or offers any incentive to support the combination suggested by the Examiner. (See In re Geiger, 2 USPQ2d at 1278.)

With regard to amended claims 2, 3 and 11 (which incorporates the limitations of original claims 12 and 13), the Applicant respectfully disagrees with the Examiner. The Examiner states that Dooley discloses the device further comprising an inner chamber 14 with a perforated sleeve in the canister body, the inner chamber in fluid communication with the fluid chamber and the inner chamber configured to receive a supply of chemicals. While Dooley does show a canister body had it has a component which has some perforations or orifices, this is not as is set forth in Applicant's claims, as amended. In Dooley, the device has a distributor head 14, with orifices 19 in the upper portion thereof, which connects to the inlet 23 via the T-member nozzle 15. Water flows into the T-member 15 and is directed upward thereby to the distributor head 14 where the water is forced out through the orifices 19 to spray onto the chemicals in the container 50. The dissolved compound falls by gravity into the cavity 2 within housing 10. Applicant's claims (2, 3 and 11), as amended, identify the supply of chemicals as being disposed inside the inner chamber, which is a perforated sleeve (claim 3 and 11). To the extent the distributor head 14 of Dooley is an inner chamber or a perforated sleeve, neither of which is conceded, the supply of chemicals are not received therein. The distributor head 14 of Dooley is more analogous to a spray nozzle for spraying water or other fluid toward and against the solid chemical to dissolve it instead of an inner chamber that receives and holds the chemical for dissolving. As set forth in the Specification and shown in

the drawings, the solid chemical material is placed in the perforated sleeve and then water is allowed to flow into the fluid chamber, through the sleeve and past the chemical, via the perforations in the sleeve. Unlike Dooley, there is no spraying in Applicant's invention. The inlet is closed to stop fluid inflow and the chemical dissolves in the fluid chamber over time, with the water in the fluid chamber contacting the chemical through the perforations in the sleeve. Once dissolved, the operator opens the valve at the outlet to connect the vacuum system to the fluid chamber and suck the solution through the vacuum line, thereby cleaning, sanitizing and deodorizing the vacuum line. This is not disclosed in the prior art and nothing in the Dooley and Mock patents teach, compel or suggest such a configuration. As such, the Applicant respectfully believes that the claims of the present patent application are not obvious in light of Dooley or Mock (see In re Fritch, 23 USPQ2d at 1783; In re Geiger, 2 USPQ2d at 1278) and should be found to be allowable.

Rejection of Remaining Claims

With regard to the rejections of the remaining claims in the present Office Action, which the Examiner rejected under Section 103(a) as being unpatentable over Dooley and Mock and further in view of other references, the Applicant respectfully disagrees with this conclusion. As set forth above, neither Dooley nor Mock result in claims 1 and 11, the independent claims, being obvious in light thereof. The remaining claims all depend from either claim 1 or claim 11. Nothing in Dooley, Mock or the other references teach, suggest or compel Applicant's invention as set forth in the claims. As such, the Applicant respectfully

believes that the remaining claims of the present patent application are not obvious in light of the referenced prior art (see In re Fritch, 23 USPQ2d at 1783; In re Geiger, 2 USPQ2d at 1278) and these claims should also be found to be allowable.

In light of the above amendments and arguments, Applicant respectfully requests the Examiner to withdraw the rejection of the claims, as amended, in the subject patent application. Applicant's original application included fees for three independent claims and a total of twenty claims. No claims are being added and four claims are being deleted, including one independent claim. Therefore, after this amendment a total of sixteen claims, including two independent claims, are pending in this application. No additional fees for claims are believed due.

In view of the foregoing, it is submitted that this application is in condition for allowance. Reconsideration of the rejections in light of this Amendment is requested. Applicant believes that the amended claims are in condition for allowance. Allowance of claims 1-11 and 14-18 is respectfully solicited.

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Respectfully Submitted,

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